



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,583	06/19/2006	Noriyoshi Munenaga	2006_1352	1458
513	7590	02/03/2011	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503			YANCHUK, STEPHEN J	
		ART UNIT	PAPER NUMBER	
		1729		
		NOTIFICATION DATE		DELIVERY MODE
		02/03/2011		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[ddalecki@wenderoth.com](mailto:ddalecki@wenderoth.com)  
[coa@wenderoth.com](mailto:coa@wenderoth.com)

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,583	<b>Applicant(s)</b> MUNENAGA ET AL.
	<b>Examiner</b> STEPHEN YANCHUK	<b>Art Unit</b> 1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 June 2010.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,3-7,10 and 11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,3-7,10 and 11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-444)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in prior office action.
2. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 06/09/2010.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/09/2010 has been entered.

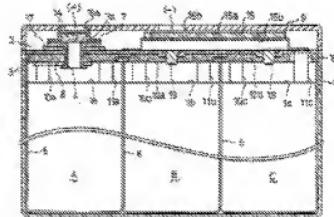
***Claim Rejections - 35 USC § 112***

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The members are not clearly identified and therefore can not be examined. MPEP 2144.04 further obviates classification of one element into multiple elements.

**Claim Rejections - 35 USC § 102**

3. Claims 1, 3-7 rejected under 35 U.S.C. 102(b) as being anticipated by Murashige et al (USPAT 7294433).

Claim 1: Murashige teaches a battery case containing a plurality of batteries (1) that have an anode, cathode, and electrolyte [Abstract, Col 1-2]. The case includes housing (5). D1 is represented in the below figure as the space between the casing wall. The case includes a cap (9). The case includes a terminal (7, 15). Leads connect the internal battery to the outside terminal (10, 11). A member is included inside of the battery casing that expands the internal distance (D2) of the battery (3) wherein the outer faces of this member are in contact with the inner faces of the case. D2 and D1 are equal. The member includes voided regions that surround and/or sandwich lead elements [Figure 3 (reproduced below)].



Claim 3: The member is taught to be fitted with the rivet (4) and washer wherein the prior art is interpreted to "press" a portion of the electrical connecting path [6:26-34].

Claim 4: The member is taught to be resin which is insulating [6:28].

Claim 5: The member is bonded to the case [6:27].

Claim 6: The member provides connections for both positive and negative connection elements and therefore sandwich each of these members [Fig 3].

Claim 7: The member further comprises separate gasket elements to seal the battery (18).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murashige et al (USPAT 7294433) as applied to claim1 above, and further in view of Hagino et al. (JP Pub. No. 2002/170546) ("Hagino").

Murashige teaches a battery case configured to have the positive and negative electrode on the same face of the battery. Murashige fails to teach the materials of the electrical components.

Regarding claim 10, Hagino teaches aluminum foil constitutes the positive electrode (see paragraph [0036]); copper foil constitutes the negative electrode (see paragraph [0036]); the positive electrode 41 and the negative electrode 43 both have an axis non coating part 40 (non coating portion) that is not covered with active material (see paragraph [0014] and figure 1); an inner surface of lower lid 12 (inner bottom face) provided for the barrel 11 (battery case) (see figure 4); a positive lead 7 as one of the lead, which connects the aluminum foil to the electrode

terminal 91 (see paragraph [0014] and figure 1); and a negative lead 7 which connects the copper foil to the lower electrode terminal 91 which is a part of the lower lid 12 (inner bottom face), wherein the part is where the positive lead 7 and the aluminum foil are electrically connected to each other (see figure 1). Hagino also teaches the positive electrode 41 in an upper end of the rolled electrode body 4 (power generating element) and the negative electrode 43 in a lower end of rolled electrode body 4 (power generating element) (see figure 7).

Regarding claim 11, Hagino teaches aluminum foil constitutes the positive electrode (see paragraph [0036]); copper foil constitutes the negative electrode (see paragraph [0036]); the positive electrode 41 and the negative electrode 43 both have an axis non coating part 40 (non coating portion) that is not covered with active material (see paragraph [0014] and figure 1); an inner surface of lower lid 12 (inner bottom face) provided for the barrel 11 (battery case) (see figure 4); a positive lead 7 as one of the lead, which connects the aluminum foil to the lower electrode terminal 91 which is a part of the lower lid 12 (inner bottom face) (see paragraph [0014] and figure 1); and a negative lead 7 as one of the lead, which connects the copper foil to the electrode terminal 91, wherein the part is where the negative lead 7 and the copper foil are electrically connected to each other (see figure 1). Hagino indirectly teaches the positive electrode 41 in a lower end of the rolled electrode body 4 (power generating element) and the negative electrode 43 in an upper end of rolled electrode body 4 (power generating element) (see figure 4) because Hagino teaches a battery can 1 comprising an electrode terminal mechanism 9 attached to each lid 12 and that the lead 7 on the positive electrode side and negative electrode side is attached to the electrode terminal mechanism 9 (see figure 4). The determination of placement of the negative pole in an upper or lower end is relative and a person having ordinary

skill in the art would be capable of positioning the poles in opposite directions to provide for a functional battery.

It would have been obvious to modify Murashige by Hagino because Hagino teaches a secondary battery with lower internal resistance and better productivity [Problem to be Solved]. MPEP 2144.04 Rearrangement of Parts further obviates the arrangement to place the negative electrode terminal of Murashige on the bottom of the battery

Claim 10-11: Hagino can be used to modify Murashige in terms of elements (copper and aluminum). Murashige then is interpreted to read on the claims wherein the positive and negative electrodes are located in different regions of the same face wherein the positive region is interpreted to be on the "upper end" and the negative region on the "lower end".

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN YANCHUK whose telephone number is (571)270-7343. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ula Ruddock can be reached on 571-277-1481. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/STEPHEN YANCHUK/  
Examiner, Art Unit 1795

/Ula C Ruddock/  
Supervisory Patent Examiner, Art Unit 1729